Remarks

The amendments to the claims

Applicant is taking advantage of the RCE in this application and a parallel RCE in the CIP of this application, USSN 10/765,424 to rationalize the claims in the two applications and thereby to deal with the double patenting rejection which Applicant received in the CIP. The claims in this application have been to systems and methods for "supporting management of a business"; in the course of further development of the invention, it has become apparent that the claimed apparatus and methods are useful not just to support management of a business, but also to support management of any collaborative activity. Applicant is now generically claiming the invention disclosed in the present application as systems and methods for supporting management of a collaborative activity. Since a business is a collaborative activity, the generic claims are fully supported by the disclosure in the present application of the species in which the invention is used in the management of a business.

New claim 211 is fully supported by the Specification as filed. The limitation that the persons who use the system "[are not] specialists in information technology " is supported throughout the Specification, but particularly at page 23, lines 9-20. Access control in the system is disclosed in FIG. 29 and discussed at page 29, lines 9-12. The amendments to claims 191-197 merely serve to bring these claims into conformity with new claim 211. The amendment to claim 198 is similarly supported, and the amendments to claims 199-209 conform those claims to amended claim 198.

Patentability of the amended claims over the references

The Buteau reference

In the final Office action of 4/13/2006, Examiner rejected claims 187-194 and 197-210 as being anticipated by the Buteau reference. As set forth in the *Abstract,* the Buteau reference discloses a system that evaluates an enterprise architecture to see how architectural changes to the enterprise affect the enterprise architecture.

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The enterprise architecture is represented using tables in a relational database system and includes a work flow model, an information model, and a technology model. The enterprise architecture itself is based on the Department of Defense's Technical Architecture Model for Information Management (TAFIM). Buteau's FIG. 2 shows the TAFIM model. As can be seen from FIG. 2 and the discussion of FIG. 1 at col. 1, lines 23-35, the TAFIM model is concerned with an enterprise's infrastructure, not with managing whatever it is that the enterprise is using the infrastructure to do. This concern with infrastructure is also apparent from the user interface shown at FIGs. 8-10. FIG. 8 shows a screen for inputting information about locations belonging to the enterprise; FIG. 9 shows an SQL query that is used in Buteau's system to return information about all processes that relate to customer data. FIG. 10 shows the result of the query. As is apparent from FIG. 9, users who wish to obtain information from Buteau's system must be extraordinarily skilled in SQL (see col. 22, lines 55-62). Buteau's system is in short not for use by a person who is not a specialist in information technology.

Patentability of claim 211 over Buteau

In order to clarify the distinctions between Applicant's " system for supporting management of a collaborative activity" and Buteau's system, Applicant has replaced claim 187 with new claim 211, which reads as follows:

> **211. (new)** A system for supporting management of a collaborative activity by persons involved therein, the persons not being specialists in information technology and
> the system comprising:
> a representation of a model of the collaborative activity, the representation being accessible to a processor and the model of the collaborative activity including model entities, the model entities providing access to information concerning the collaborative activity, being organized into a plurality of hierarchies having a plurality of types, and a given model entity being capable of simultaneously belonging to a hierarchy having one of the types and a hierarchy having another of the types; and
> a graphical user interface for the system which the processor provides to the persons, the graphical user interface permitting a person of the persons to perform operations on a model entity as limited by a type of access which the person has to the model entity, the operations including

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controlling access to the model entity, creating, modifying, and/or deleting the model entity, assigning the model entity to a location in a hierarchy, accessing and/or modifying the information concerning the collaborative activity via the model entity, viewing model entities as ordered by a hierarchy to which the entities belong, and viewing model entities as ordered by a value in the information concerning the collaborative activity to which the entities give access.

As is clear from the foregoing, Buteau's system is not about "a system for supporting management of a collaborative activity by persons involved therein", its model is not "a model of the collaborative activity", and the persons who use Buteau's system are not persons "[who are not] specialists in information technology". For the foregoing reasons, Buteau cannot anticipate claim 211. Other limitations of claim 211 that are not disclosed in Buteau include the following:

Model entities and hierarchies

Buteau does not disclose "a plurality of hierarchies having a plurality of types and a given model entity being capable of belonging simultaneously to a hierarchy having one of the types and a hierarchy having another of the types". The location which Examiner cites at for this limitation, col. 9, line 59 through col. 10, line 20, merely discloses that entities representing organizations may belong to hierarchies of organizations. This is shown at 290 in FIG. 4 by the line showing that an organization can be related to another organization. The cited location further says that relationships between organizations must otherwise be via processes that involve both organizations. As shown at 360 in FIG. 4, processes cannot be related to other processes, and consequently are not hierarchical.

Buteau's graphical user interface

The total disclosure of Buteau's graphical user interface is FIGs. 8-10 and the explanation of these figures at col. 22, lines 20-45. As shown there, a user may use screens to edit data; all other interactions appear to be via SQL queries. An SQL query-based interface is of course not one that is usable by persons "[who are

not] specialists in information technology". Neither the figures nor the descriptions show using the GUI to "control[] access to the model entity", "assign[] the model entity to a location in a hierarchy", "view[] model entities as ordered by a hierarchy to which the entities belong", or "view[] model entities as ordered by a value in the information concerning the business to which the entities give access", as required by Applicant's claim 211.

Because Buteau does not disclose the foregoing limitations of claim 211, the reference cannot serve as a basis for the rejection of the claim under 35 U.S.C. 102(e). With regard to dependent claims 191-196, these claims describe various aspects of the GUI used in Applicants' system (see FIGs. 6-9, 12-35) and Buteau's SQL query interface cannot reasonably be construed to disclose what is set forth in these claims.

Patentability of the claims over the Knoth reference

Examiner applied the Knoth reference to claims in USSN 10/765,424 which were similar enough to the claims in the present application to receive a double patenting rejection in USSN 10/765,424. Applicant filed an IDS with the reference in the present application on June 6, 2006. The following discussion takes Examiner's application of the Knoth reference to USSN 10/765,424 into account.

The disclosure of the Knoth reference

Knoth is a survey as of April 1997 of tools available for collaborative design. After an introduction in paragraphs 1-6, Knoth discusses four different classes of tools used in collaborative design:

- Tools for design conferences via the Internet. These tools, described in paragraphs 7-13, permit remotely-located designers to work together in real time on a design which is visible via the network to all of them.
- Tools for sharing access to CAD design information, described in paragraphs 14-19. These tools give controlled access to the design information and in

some cases work with CAD design information from different CAD environments.

- Tools for locating existing parts via networks, described in paragraphs 20 and 21. The tools employ a database of attributes of parts and provide a user interface which permits the user to narrow the desired attributes until the part is found.

- Tools for improving communication between manufacturers and suppliers, described in paragraphs 22-24. One of the tools tracks jobs; another permits a manufacturer to publish design information to its suppliers.

Two things must be noted at this point in the discussion: first, though these tools are used for collaborative design work, *none* of them provides a *model of the collaborative activity of designing;* indeed, the models mentioned in the reference are not models of activities, but models of *designs.* Thus, none of the tools provides "a representation of a model of a collaborative activity". Second, there is no suggestion in Knoth that the four classes of tools could be combined in a single tool; consequently, rejections that are based on combinations of the tools are properly rejections under 35 U.S.C. 103, not 35 U.S.C. 102.

Knoth and claim 211

As one would expect from the fact that none of the tools provides "a representation of a model of a collaborative activity", none of the tools anticipates claim 211 and no combination of the tools shows all of the claim's limitations. None of the tools provides "a representation of a model of the collaborative activity including model entities"; none provides such a model in which the model entities are organized into a plurality of hierarchies having a plurality of types and can belong simultaneously to hierarchies of different types.

As one would also expect, none of the tools has a graphical user interface which can be used on the model entities in the manner set forth in the claim. In particular, there is no notion anywhere in the disclosure of Knoth of using a GUI to assign a model entity a location in a hierarchy or of viewing the model entities

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either as ordered by a hierarchy to which they belong, or as ordered by a value in the information concerning the collaborative activity to which the entities give access. A good example of the distinctions involved here is provided by the part location tools described in paragraphs 20 and 21. There, a hierarchy of categories is used to determine which part a user wants, but the parts themselves are not organized hierarchically and the categories in the hierarchy of categories are certainly not "model entities" in a "representation of a model of a collaborative activity", as required by the claim.

As will be immediately apparent from the foregoing, none of the tools disclosed in Knoth anticipates claim 211, nor are there any combinations of the tools disclosed in Knoth which show all of the limitations of claim 211. Claim 211 is consequently patentable over Knoth. Examiner will immediately see that the same is true with regard to claim 198. Further, since claims 211 and 198 are patentable over Knoth, so are all of the dependent claims. Finally, the combination of Buteau and Knoth also does not disclose all of the limitations of claims 211 and 198, and consequently, all of the claims are patentable over the references.

Traversal of the objection to claims 197 and 210

These claims are Beauregard claims written in dependent form. Applicant's attorney has been using such claims for at least five years now and knows of nothing in 35 U.S.C. 112, fourth paragraph, 37 C.F.R. 1.75, or MPEP 608.01(n)(III)which prohibits such claims. The basic rule is set forth in 35 U.S.C. 112, fourth paragraph:

> a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

37 C.F.R. 1.75 and MPEP 608.01(n)(III) merely restate the above. Claims 197 and 210 both "contain a reference to a claim previously set forth and then specify

a further limitation of the subject matter claimed". Taking claim 197 as currently amended as an example, it reads as follows:

> **197. (currently amended)** A data storage device, the data storage device being characterized in that:
>   the data storage device contains a program which, when executed in a computer system, implements the system set forth in claim ~~187~~211.

It contains a reference to claim 187 and the language "implements the system set forth in claim 187" necessarily means that claim 197 includes all of the limitations of claim 187. The "further limitation" is that the system of claim 197 is implemented in a program contained in the data storage device. Claim 197, and claim 210, which is like claim 197 except that it refers to claim 198, are thus both perfectly proper dependent claims by the standards set forth in the patent statute, the patent rules of practice, and the MPEP.
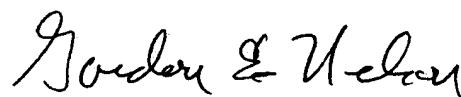
Applicant's attorney notes that he called Examiner Krisciunas to discuss the rejections of claims 197 and 210 on August 3, 2006 and that she discussed the claims with her Primary and called Applicant's attorney on that day to indicate that she would withdraw the rejections of those claims.

Conclusion

In the foregoing, Applicant has demonstrated that the amended claims are fully supported by the Specification as originally filed and has demonstrated that the claims as amended are patentable over the Buteau and Knoth references. In demonstrating the latter, Applicant has satisfied the requirements of 37 C.F.R. 1.111(b) and has thereby also satisfied the requirements of 37 C.F.R. 1.114(c). Applicant consequently respectfully requests that Examiner withdraw the finality of the Office action of 4/7/06 and continue with the examination of the claims as amended.

A check for fees of $395.00 for the RCE and $60.00 for a one-month extension of time accompany this amendment. No other fees are believed to be required. Should any be, please charge them to deposit account number 501315. Excess fees should be deposited to that account.

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Respectfully submitted,

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